Before the

Federal Communications Commission

Washington, DC 20554

In the Matter of	)	
	)	
Amendment of Parts 21 and 74 To Enhance	)	
the Ability of Multipoint Distribution Service	)	RM-9060
And Instructional Television Fixed Service	)	
Licensees to Engage in Fixed	)	
Two-Way Transmissions	)	

COMMENTS OF CARITAS TELECOMMUNICATIONS, INC.

Caritas Telecommunications, Inc. ("Caritas"), by its attorneys, hereby submits these comments in response to the above-referenced Petition for Rulemaking ("Petition"). The Petition was filed by a coalition of participants in the wireless cable industry in an effort to enhance the ability of Multipoint Distribution Service (MDS) and Instructional Television Fixed Service (ITFS) licensees to engage in fixed, two-way transmissions.[1/]

I. INTRODUCTION

Caritas holds several ITFS licenses and serves as the educational television provider for the schools and parishes of the Diocese of San Bernardino. Because of the full-curriculum programming that it offers, Caritas also provides programming to public schools, home schools, and other private schools within its coverage area. Caritas leases excess capacity to wireless cable operators on several of its ITFS channels.

Caritas cautiously supports the goal of the Petition -- to afford MDS and ITFS licensees the flexibility to implement spectrally efficient digital transmission techniques to

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[1/] *See* Public Notice, DA 97-637 (rel. March 31, 1997) (establishing pleading cycle on the Petition). The Commission subsequently extended the deadline for comments on the Petition to May 14, 1997. Public Notice, RM-9060 (rel. Apr. 28, 1997).

meet marketplace demand for two-way interactive services. Caritas wants its wireless cable partners to be viable competitors in the multichannel video programming marketplace. However, the Commission must proceed cautiously in evaluating this extremely complex proposal. Caritas offers several suggestions to protect the rights of educators and wireless cable operators.[2/]

II. DISCUSSION

The Commission should convert MDS channels 1, 2, and 2A from their current use for point-to-multipoint transmissions to subscriber homes, and allocate them as the uplink channels for multipoint-to-point transmissions from subscriber homes to wireless transmitter sites or cellularized receive hubs.[3/] In place of those channels, the Commission should allocate the current ITFS response channels for additional point-to-multipoint downlink spectrum.[4/] The rest of the ITFS and MDS spectrum would be left as is, to be used for point-to-multipoint broadcast operations. The Commission could institute a long-term plan to phase out existing uses of the reallocated bands. Incumbent licensees could continue to be licensed on the reallocated channels, as long as the channels were devoted to their new use.

This reallocation would have at least two engineering advantages. First, the wide separation between MDS channels 1, 2, and 2A (at 2.1 GHz) and the remaining MDS and ITFS channels (at 2.6 GHz) would provide excellent interference protection between the uplink and downlink transmission bands. Second, this wide separation would enable the uplink transmitters to be designed with relaxed stability criteria, which would allow these

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[2/] *See* Engineering Statement of Michael Collis (attached).

[3/] Engineering Statement at ¶ 2.

[4/] Engineering Statement at ¶ 3.

transmitters to be marketed to consumers at reasonable prices.[5/] Moreover, an additional benefit would be to aid in the design of ITFS and MDS downconverters to resist overload from the new WCS transmitters, because the preamplifiers in downconverters designed for this band plan need not be as selective as they would under narrower separation criteria.[6/]

Uplink transmitters should be limited to one watt output power with a maximum of 30 dBi of antenna gain, to mimimize the potential for interference. Uplink transmitters should be type accepted.[7/]

III. CONCLUSION

Caritas appreciates this opportunity to comment on the Petition, and looks forward to working with the wireless cable community to achieve the goals envisioned therein.

Respectfully submitted,

CARITAS TELECOMMUNICATIONS INC.

By: _____

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Dated: May 14, 1997

[5/] Engineering Statement at ¶ 4.

[6/] *See Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service*, Petition for Expedited Reconsideration (Mar. 10, 1997) (concern that WCS transmitters could overload ITFS and MDS downconverters).

[7/] Engineering Statement at 5.

CARITAS TELECOMMUNICATIONS

DIOCESE OF SAN BERNARDINO

ENGINEERING STATEMENT
OF MICHAEL V. COLLIS

My name is Michael V. Collis, Chief Engineer of Caritas Telecommunications, an active ITFS broadcaster. I have 8.5 years of experience as a supervisor of radio and microwave maintenance for the County of San Bernardino, 25 years as an active Ham Radio operator, and have been employed by Caritas as its full time engineer since 1992.

Caritas Telecommunications proposes the following comments that would be both economic and of sound engineering practice as well as protect the rights of educators and wireless operators.

1) In general, Caritas favors the use of two way digital transmissions on MDS & ITFS but as proposed it leaves to many things open to experimentation and possible interference.

2) The FCC should have a 5 to 10 year plan to allow wireless operators to phase out analog MDS channels 1, 2, &2a and shift this spectrum for use as uplink from subscriber and educational sites to either the wireless transmitter site with sectorized receive of the 2.15 MHz MDS spectrum or separate cellularized receive hubs within the PSA of the particular wireless system the choice up to the wireless operator with agreement of the ITFS licensees.

3) The FCC should also plan to phase out the response channels and allocate some of the MDS channel 1, 2 & 2a spectrum to replace the response channel uplink spectrum. This would be in co-operation and agreement with the wireless operator. In areas that have no wireless systems, educators could continue to use existing response channels. The response spectrum should be combined into one continuous piece of spectrum and used for downlinking of digital signals on a non interference basis to existing response systems in adjacent areas outside of the wireless operator's PSA.

4)The wide separation of frequencies between the 2.154 MDS band and the 2.6 GHz ITFS-MMDS bands would provide excellent interference protection. The stability of the uplink transmitters could be relaxed to promote economically produced uplink equipment. To economize the installation at a subscriber or educators location, the wide frequency separation would permit uplink and downlink antennas to share the same mast. Also a combination downconverter and uplink transmitter could be easily duplexed into the same antenna.

5) Power should be limited to 1 watt output power from the uplink transmitter and a maximum of 30 dBi of antenna gain to minimize interference into adjacent areas. The uplink transmitters should be type accepted but not requiring a separate license for each subscriber location. A single area license could be issued to the wireless operator and the individual educators to indicate operation over the PSA.

6) Allow booster or beam bender stations to relay the uplink MDS 1,2 & 2a from the shadowed area back to the wireless operator's transmitter location or a hub location within the PSA on a non interference basis to adjacent systems.

7) To be effective financially and to provide interference free operation, this proposal needs to be a nation-wide standard. The FCC should allow a phase-in time to give incumbent analog MDS, MMDS, ITFS operators time to make the change.

8) An added benefit would be to help speed up the development of more selective ITFS-MMDS downconverters to resist overload from the FCC proposed WCS service.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed on May 14, 1997

Michael V. Collis

Michael V. Collis

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